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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/845,552

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Barton A. Smith

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08/24/2005

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EXAMINER

NGUYEN, KIMNHUNG T

ART UNIT

PAPER NUMBER

2677

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/845,552

Applicant(s)

SMITH ET AL.

Examiner

Kimnhung Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 10-19, 22-28 and 30-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-28, 30-34 and 37 is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-19, 22-24, 35, 38 and 39 is/are rejected.
- 7) ☐ Claim(s) 7, 36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

This Application has been examined. The claims 1-7, 10-19, 22-28, 30-39 are pending.

The examination results are as following.

#### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6, 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holehan (US 6,043,809) in view of Gerpheide (US 6,473,069).

Regarding claim 1, Holehan discloses in figure 1, an electronic device comprising a housing comprising a face, a back and an outside edge, the back being located substantially behind the face, and a user input detector (see detector circuit, see col. 6, lines 20-24), electrically coupled to the touchpad (see col. 6, lines 20-24), for detecting user input from the at least one touchpad (see col. 6, lines 20-24). However, Holehan does not disclose the outside edge comprising at least two adjoining and at least one corner edge wherein two adjoining sections of the outside edge are connected at an angle by each of the at least one corner edge having at least one outside edge; at least one touchpad that is continuously disposed along the at least two adjoining sections and the at least one corner edge of the outside edge of the housing in order to form a single touchpad along the at least two non-parallel sections and the at least one corner edge. Gerpheide discloses an apparatus including touchpad (40) in fig. 2B, wherein the outside edge comprising at least two adjoining (42) and at least one corner edge wherein two adjoining

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sections of the outside edge are connected at an angle by each of the at least one corner edge having at least one outside edge; at least one touchpad (40) that is continuously disposed along the at least two adjoining sections and the at least one corner edge of the outside edge of the housing in order to form a single touchpad along the at least two non-parallel sections and the at least one corner edge (see col. 4, lines 60-67, col. 5, lines 15-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of at least two adjoining (42) and at least one corner edge wherein two adjoining sections of the outside edge are connected at an angle by each of the at least one corner edge having at least one outside edge; at least one touchpad (40) that is continuously disposed along the at least two adjoining sections and the at least one corner edge of the outside edge of the housing in order to form a single touchpad along the at least two non-parallel sections and the at least one corner edge as taught by Gerpheide into the system of Holehan because this would define a perimeter of the touch pad surface already mentioned and provide immediate tactile feed to the user through the finger making contact with touchpad.

Regarding claims 2-3, Holehan does not disclose the at least one touchpad extends substantially about a perimeter of the housing along the at least one outside edge of the housing, and the perimeter of the housing is rounded. Gerpheide disclose in fig. 22B, at least one touchpad extends substantially about a perimeter of the housing along the at least one outside edge of the housing, and the perimeter of the housing is rounded.

Regarding claim 4, Holehan discloses in fig. 1, the user input detector (see detector circuit) comprises capacitive sensing technology for detecting user input (see col. 4, lines 4-7).

Regarding claims 5 and 30, Holehan discloses the at least one touchpad comprises at least one of an inherent texture for providing a tactile feedback to the user (because the system having processing program having many words programs, see col. 3, lines 22-26).

Regarding claims 6, 10, Holehan does not disclose that the electronic device of claim 1, wherein the housing comprises at least a display. Gerpheide discloses in fig. 2B, the housing comprises a display (see abstract, see fig. 2B).

Regarding claim 7, Brisebois discloses a sliding contact (see scroll through the list by dragging) with the touchpad causes an adjustment of a variable (see col. 2, lines 51-55).

Regarding claim 11, Holehan discloses that the electronic device of claim 10, wherein the at least one outside edge of the housing is located about at least one edge of the display, and the at least touchpad (232) is disposed along at least a portion of the at least one edge of the display.

Regarding claim 12, Holehan discloses further a primary input device (cursor) for controlling a pointer in the display, wherein the at least one touchpad serves as a secondary input device for controlling at least the scrolling (see col. 3, lines 45-46).

Regarding claim 13, Holehan discloses that the electronic device of claim 10, wherein a sliding contact with the touchpad causes at least the scrolling (see col. 4, lines 20-34).

3. Claims 14-19, 22-24, 35 and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holehan (US 6,043,809) and Gerpheide (US 6,473,069) in view of Ross et al. (US 6,608,628).

Regarding claims 14-16, Holehan does not disclose the at least one touch pad comprises a plurality of section plurality of section of the at least one touchpad controls movement in one of at least two different one-dimensional axes. Gerpheide discloses in fig. 2B, a touch pad (40) comprises a plurality of section plurality of section (42) of the at least one touchpad controls movement.. Ross et al. discloses in figs. 5, a multi-dimensional manipulation of objects displayed on the screen (see col. 6, lines 65-67, and col. 7, lines 1-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the using of a multi-dimensional manipulation of objects displayed on the screen as taught by Ross et al. into the system of Holehan and Gerpheide et al. because this would provide an interactive manipulation of objects with the mouse or other user input device, such as rotation, translation, and zoom.

Regarding claims 17-18, Holehan and Gerpheide do not disclose that the multi-dimensional manipulation of objects comprises two-dimensional manipulation of objects displayed on the display screen and comprises three-dimensional manipulation of objects displayed on the display screen. Ross et al. discloses the multi-dimensional manipulation of objects comprises two-dimensional manipulation of objects displayed on the display screen and comprises three-dimensional manipulation of objects displayed on the display screen (see figs. 5, see col. 6, lines 65-67 and col. 7, lines 1-6).

Regarding claim 19, Holehan discloses in figure 1, a method of touching comprising the steps of: displaying at least one object on a graphic display (212); simultaneously touching at least two touchpads (230, 232) that are each disposed about an outside edge of a housing; detecting the simultaneous touching; and transmitting an electrical signal upon detecting the

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simultaneous touching to a control circuit (see fig. 3, see system memory 3). However, Holehan and Gerpheide do not disclose each of the at least two dimensions is manipulated in response to touching a corresponding touchpad within the at least two touchpads. Ross et al. discloses the two dimensions are manipulated (see col. 7, lines 3-5).

Regarding claim 22, Holehan discloses further the manipulation comprises navigating (see scrolling) within the display in accordance with the output signal.

Regarding claims 23-24, Holehan discloses the method of claim 19, wherein the housing comprises at least two outside edges (230, 232)) and the step of touching comprises using an inherent two hands to provide dual sliding contacts along at least two different outside edges and wherein the step comprises using tactile feel to position the fingers along the outside edge of the housing.

Regarding claim 35, Holehan and Gerpheide do not disclose the three-dimensional manipulation comprises one of zoom and rotate. Ross discloses the three-dimensional manipulation comprises one of zoom and rotate (see col. 8, lines 13-17).

Regarding claim 38, Holehan does not disclose the display screen is on a display contained within a housing. Gerpheide discloses in fig. 2B, a display screen is on a display contained within a housing (see abstract).

Regarding claim 39, Holehan does not disclose the display is on a graphical display substantially surrounded by the housing on which the at least two touchpads. Gerpheide discloses the display is on a graphical display substantially surrounded by the housing on which the at least two touchpads (42) are each disposed about an outside edge of the housing.

***Allowable Subject Matter***

4. Claims 25-28, 30-34 and 37 are allowed.
5. Claim 7, 36 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

The following is a statement of reasons for the indication of allowable subject matter:

None of the cited art teaches or suggests an electronic device or touchpad input device comprising a sliding contact with the at least one touchpad causes an adjustment of an operating variable unrelated to graphical object display as claim 7; or a dimension selection switch able to select one of at least two dimensions; a user input detector, electrically coupled to the touchpad and the dimension selection switch, for detecting user input from the touch pad and a selected dimension selected by the dimension selection switch and transmitting input signals, wherein the input signals controls movement in the selected dimension in response to the user input as claim 25; or the at least two touchpads comprise at least three touchpads, and wherein each of the at least three touchpads correspond to one of x-axis manipulation, and one of zoom and rotate as claim 36.

***Response To arguments***

7. Applicant's arguments with respect to claims 1-7, 10-19, 22-28 and 30-39 have been considered but are moot in view of the new ground(s) of rejection.



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8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

### *Correspondence*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number is 703-308-0425. The examiner can normally be reached on MON-FRI, FROM 8:30 AM-5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (703) 308-6725. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimnhung Nguyen  
August 15, 2005



**ALEXANDER EISEN  
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